

List of Current Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1 - 23 (Cancelled).

24. (New) A microwave-conducting arrangement, comprises:
a non-conductive body, on at least a portion of whose surface of any shape are applied one, or more, electrically conductive layers.

25. (New) The microwave-conducting arrangement as claimed in claim 24,
wherein:
the surface of the body is curved sinusoidally.

26. (New) The microwave-conducting arrangement as claimed in claim 24,
wherein:
the surface of the body is structured.

27. (New) The microwave-conducting arrangement as claimed in claim 24,
wherein:
the body comprises elastic material.

28. (New) The microwave-conducting arrangement as claimed in claim 24,
wherein:
the electrically conductive layer has a preferred thickness of 0.1 - 100 μm .

29. (New) The microwave-conducting arrangement as claimed in claim 24,
wherein:
the electrically conductive layer is manufactured by metallizing the surface of the body.

30. (New) The microwave conducting arrangement as claimed in claim 29, wherein:

the metallizing of the surface of the body is done in a flame-spraying process.

31. (New) The microwave conducting arrangement as claimed in claim 29, wherein:

the metallizing of the surface of the body is implemented by chemical metallizing.

32. (New) The microwave conducting arrangement as claimed in claim 29, wherein:

the metallizing of the surface of the body is manufactured by galvanizing.

33. (New) The microwave conducting arrangement as claimed in claim 29, wherein:

the metallizing of the surface of the body is done with a vapor-deposition process, especially sputtering or PVD-, or CVD-, coating.

34. (New) The microwave-conducting arrangement as claimed in claim 24, wherein:

the metallized coating has a predetermined structure, one with gap-shaped interruptions for suppressing undesired modes, or for the in- or out-coupling of microwave signals.

35. (New) The microwave-conducting arrangement as claimed in claim 24, wherein: of concern, is an externally metallized, cylindrical or conical insulator, which is applied as a hollow conductor.

36. (New) The microwave-conducting arrangement as claimed in claim 24, wherein:

of concern, is an externally and internally metallized, plastic tube, which is applied as a coaxial conductor.

37. (New) The microwave-conducting arrangement as claimed in claim 24, wherein:

of concern, is a funnel-shaped, internally metallized, plastic body, which is applied as a microwave horn-antenna.

38. (New) The microwave-conducting arrangement as claimed in claim 24, wherein:

of concern, is an externally metallized, plastic body, which is applied as an in-coupling.

39. (New) The microwave-conducting arrangement as claimed in claims 35, wherein:

the plastic body is composed of complex shapes and combines the functional elements: In-coupling, hollow conductor, and horn-antenna.

40. (New) The use of a microwave-conducting arrangement as claimed in claim 25 as a mode converter.

41. (New) The use of a microwave-conducting arrangement as claimed in claim 37 having a non-ideal edge, as a dual-mode horn-antenna.

42. (New) The method for manufacturing a dielectric, microwave-conducting arrangement, comprising the steps of:

providing a non-conductive body having a surface of any shape; and
applying an electrically conductive and structured layer applied to cover at least a portion of the surface.

43. (New) The method as claimed in claim 42, further comprising the step of:

manufacturing the electrically conductive layer by metallizing the surface of the body by means of a vapor-deposition process.

44. (New) The method as claimed in claim 42, further comprising the step of:

manufacturing the electrically conductive layer by metallizing the surface of the body by means of a flame-spraying process.

45. (New) The method as claimed in claim 42, further comprising the step of:

applying the electrically conductive layer by metallizing the surface of the body by means of chemical metallizing.

46. (New) The method as claimed in claim 42, further comprising the step of:

manufacturing the electrically conductive layer by metallizing the surface of the body by means of galvanizing.